

Substantial Development Goals Report (SDG17)



2021

Partnerships for the Goals

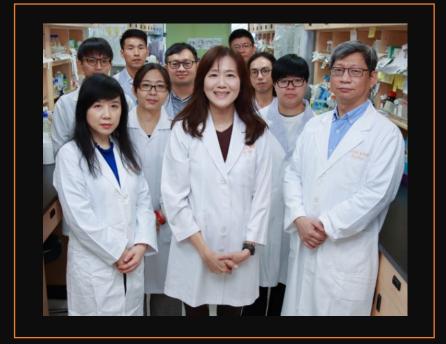


Involvement of SDG policy

Lin, Hui-Ling, Associate Professor of Department of Respiratory Therapy, Chang Gung University, was invited to become a member of the WHO respiratory care expert panel to solve the problem of insufficient respirator and respiratory therapy related equipment with local experts, and provide suggestions and detailed inspection for new equipment with her professional assistance to front-line medical staff and infected patients, which is of great help to the disease treatment of various countries. [長庚大學林蕙鈴老師貢獻專長 參與WHO呼吸照護專家小組 | 台灣好新聞 TaiwanHot]

Shih, Sin-Ru, Professor of Research Center for Emerging Viral Infections of Chang Gung University, is an expert advisory member of the Central Epidemic Command Center, providing professional and technical advice on government medical treatment and epidemic prevention, and assisting in the formulation of relevant policies and guidelines





[https://gase.most.ntu.edu.tw/articles/59?locale=zh-TW]



Involvement of SDG policy

Tung, Chuan-Chung, Professor of Institute for Radiological Research, Chang Gung University is a member of the Ionizing Radiation Safety Consultation of the Atomic Energy Council of the Executive Yuan. In order to improve the healthy application of ionizing radiation, we will assist the Atomic Energy Council of the Executive Yuan in formulating a new free radiation protection law from 2019 to more widely and accurately regulate the medical exposure of Taiwan people, so as to reduce the risk of radiation health effects. [https://www.aec.gov.tw/newsdetail/activity/5814.html]

Chang Gung University / Chang Gung Hospital cooperated with the Ministry of justice to jointly promote the work of child protection, and successively held seminars on child protection of procuratorial organs in four places across Taiwan, showing that Taiwan's child human rights protection is officially in line with international standards and that the Ministry of justice and Chang Gung Hospital attach importance to the protection of children's rights and interests. [https://www.mirrormedia.mg/story/20200812inv004/]







Cross sectoral dialogue

Healthy Aging Research Center, Chang Gung University held the 2019 annual international forum on health aging. Four scholars from Washington University in St. Louis (WUSH U) are invited to Taiwan for exchange and indepth academic discussion on relevant fields and topics. The forum shared the practical views on how to provide community services and introduce intelligent technology into future long-term care for the elderly with diseases or healthy elderly in the community. The staff of our school shared the results of aging research from the local perspective of Taiwan, hoping to provide all participants with more different views on community-based services. [https://harc.cgu.edu.tw/p/406-1033-73878,r1959.php?Lang=zh-tw]

The American Medical Women's Association (AMW) and Chang Gung University / Chang Gung Hospital held a video conference on "Taiwan hospitals and government's response policy to COVID-19". The Chang Gung medical team shared various epidemic prevention measures taken by the government from the closure of Wuhan to the present, such as mask export prohibition, border management and restrictions on visitors to Taiwan, screening and isolation measures for contacts and high-risk cases, distribution of epidemic prevention resources, and the application of Covid-19 screening strategy, cooperate with the command center to actively screen and discuss the test energy and timeliness for high-risk suspected cases and contacts.

[https://ctee.com.tw/industrynews/biomed/246080.html]







Cross sectoral dialogue

In order to expand the industrial chain channel and transform industrial demand into innovative ideas and cutting-edge technologies, the university has signed an agreement on production, learning and practice cooperation platform with 12 industrial zones in the North District and colleges and universities in 9 places, and has long cooperated with trade associations (Photonics Industry & Technology Development Association (PIDA) / Taiwan Electronic Equipment Industry Association / Taiwan Electrical and Electronic Manufacturers' Association (TEEMA), etc.), continue to promote technology sharing and industry-university cooperation through the platform, so as to promote the diffusion of university education and R & D innovative technologies, make longterm contributions to industrial upgrading and benefit human wellbeing. Every year, inter-university joint technical seminars (matchmaking) will be held regularly, which invite professors of each university to publish R & D achievements related to the topics, expand exchanges with people in the industry, share the joint marketing of technical achievements taught in each university, help promote and facilitate relevant industry-university cooperation, form a dialogue with manufacturers in various industrial zones, expand cooperation opportunities with manufacturers, and drive industry university momentum of the University. [https://cisrc.cgu.edu.tw/p/412-1064-6769.php]





Cross sectoral dialogue



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Taiwan External Trade Development Council held a "Symposium on characteristic medical and epidemic prevention between Taiwan and the United Arab Emirates". Chang Gung University / Chang Gung hospital, Taiwan External Trade Development Council, Centers for Disease Control, Ministry of Health and Welfare, and the Department of West Asian and African Affairs, Ministry of Foreign Affairs all attended the discussion on medical and epidemic prevention cooperation and public health issues. [https://tinyurl.com/m99yu88f]

CGU/ CGUH implemented the New Southward policy, grasped new opportunities, conducted long-distance exchanges with Malaysia, combined with the two main axes of "epidemic prevention medicine" and "eHealth", jointly sought various solutions to break through difficulties, and expected to integrate the trend of epidemic prevention industry and smart medicine with the advantages of Taiwan's medical materials and information technology, so as to drive the development and promote the influence of Taiwan's medical treatment. [https://tinyurl.com/2rra6b2t]

GASE of the Ministry of Science and Technology held a series of Formosa GX lectures "Taiwan-Japan Matchmaking Conference on Aging Research Cooperation". Chang Gung University exchanged with the University of Tokyo, Tokyo Institute of Technology, Institute of Physical and Chemical Research and National Institute for Materials Science, discussed and shared achievements with each other, and looked forward to continuous innovation and breakthrough, so as to promote the development and medical cooperation between the two sides. [https://cgunews.cgu.edu.tw/p/406-1049-79517,r964.php?Lang=zh-tw]



About WW-ADNI

Welcome to the World Wide Alzheimer's Disease Neuroimaging Initiative (WW-ADNI) homepage. WW-ADNI is a collaborative effort of scientists from around the world and is the umbrella organization for neuroimaging initiatives being carried out through the North American ADNI, European ADNI, Japan ADNI, Australian ADNI, Taiwan ADNI, Korea ADNI, China ADNI and Argentina ADNI.

Relationships to support the goals

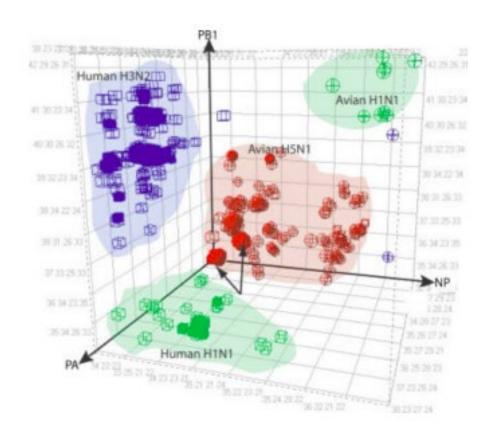
International cooperation [data collection]

- Taiwan Alzheimer's Disease Neuroimaging Initiative (TW-ADNI), which aims to develop biomarkers of Alzheimer's disease. It will verify whether MRI, nuclear medicine positron scanning, cerebrospinal fluid analysis, and blood biomarkers can be used in the early diagnosis of this disease. The data collected in this study will be publicly available to academia. Hsiao, Ying-Tsung and Lin, Kun-Ju, Professors of Chang Gung University were invited to sign the TW-ANDI and the affiliated groups to join the World Alzheimer's Disease Neuroimaging Initiative. [https://www.alz.org/research/for_researchers/partnerships/wwadni/taiwan_adni]
- The Global Alzheimer's Association Interactive Network (GAAIN) aims to unite personnel in all regions of the world in this field to establish a data sharing platform for the research of Alzheimer's disease. In addition to sharing the global clinical, imaging and other technologies for the disease, the participants also participate in transnational research projects, The participants of the center are Professor Wang, Chun-Chieh and his research office. Professor Wang's team also participated in ENIGMA alliance to understand brain structure and function by collecting MRI, DTI, fMRI, genetic data from various patient groups. [Partners The Global Alzheimer's Association Interactive Network (gaain.org)]



International cooperation [data collection]

As the human influenza virus is increasingly affecting the world, in order to develop a more matching influenza vaccine, Professor Kuan-Fu Chen of Chang Gung University/Chang Gung Hospital and Johns Hopkins CEIRS are developing an improved method to quickly identify influenza strains in the influenza season. To this end, human influenza virus strains in the United States and Taiwan are being collected and tracked as part of an effort to establish a real-time influenza case database from hospitals and other medical institutions. Such monitoring and tracking in the central database can help develop influenza vaccines that better match the seasonal virus strains prevalent. In addition, researchers from the two countries are analyzing the impact of influenza virus infection on human respiratory epithelial cells in order to better understand how to control and treat influenza infection.



NIAID CEIRS - Centers - Johns Hopkins / Center Highlight: Introducing the Johns Hopkins CEIRS Center - NIAID CEIRS / Influenza Research Database - Supported Programs (fludb.org)

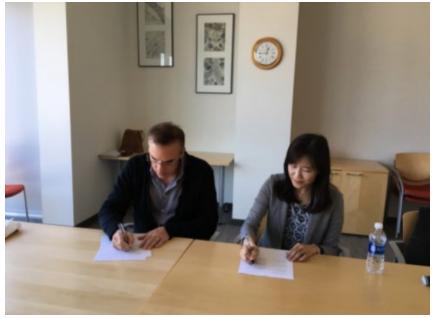


International cooperation [data collection]

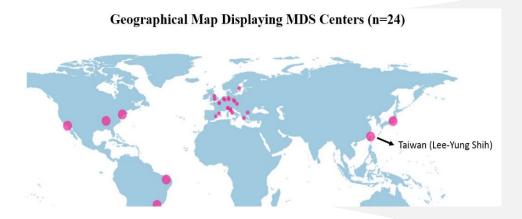
The Research Center for Emerging Viral Infections, CGU and the Center for Innate Immunity and Immune Disease (CIIID) of University of Washington, Seattle, USA signed a letter of intent for academic cooperation and visit. He also joined the team led by Dr. Wesley Van Voorhis, director of the Research Center for Emerging and reemerging Infectious Diseases (CERID), to jointly study severe and special infectious pneumonia with the subsidy of the American Academy of health. The international research team includes scientists from the United States, Britain, Brazil and South Africa, and has established a solid cooperation platform to share research materials, technologies and information with each other.

[https://rcevi.cgu.edu.tw/p/406-1030-73351,r34.php?Lang=zh-tw]











International cooperation

Chang Gung University/Linkou Chang Gung Hospital has been certified as an excellent research institution and treatment center of MDS by the MDS foundation since 2014. The International working group for the prognosis of MDS (IWG-PM) is a cooperative organization composed of researchers in this field from 24 countries invited by the MDS foundation. Its main duty now is to evaluate the impact of gene variation on the prognosis of the disease, hoping to find potential therapeutic target genes as the basis for the development of novel drugs in the future. Professor Shih, Li-Yun participated in this international cooperative research team. In addition to jointly publishing papers, the team has established a comprehensive molecular risk clustering algorithm for this disease based on clinical parameters and a variety of gene variants, so as to early identify patients in high-risk groups and give special interventional treatment.

https://www.mds-foundation.org/mds-centers-of-excellence-map-new







International cooperation

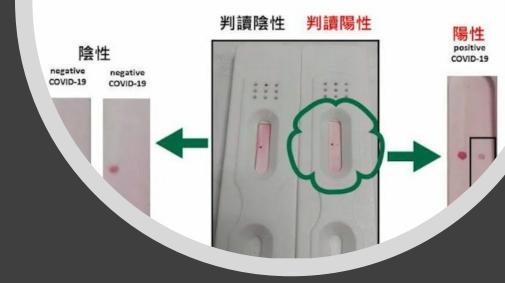
- Chang Gung University and the National Institutes of Health of the United States jointly conducted a research project on the immune response of people after different vaccines. The follow-up complete results will be provided as a reference. [長庚、美國國家衛生院合作 研究疫苗接種免疫反應 (yahoo.com)]
- Chang Gung University and Far East Bio-Tec Co., Ltd. discovered that FB-1603, the main ingredient of Apomivir in the human influenza clinical trials, could significantly inhibit the activity of COVID-19. The new drug is expected to be successfully developed and is expected to reach more than 90 billion yuan at the beginning of the year. [https://www.chinatimes.com/newspapers/20201202000374-260210?chdtv]



International cooperation

- The team of Chang Gung hospital, Chang Gung University and the University of California, USA jointly developed a new technology to interpret toxicity with experimental chips, which is faster and lower cost. It is like "Rapid Toxicology Screening", offering more possibilities in the future. [https://udn.com/news/story/7266/5716634]
- Twenty-two Covid-19 virus strains were successfully isolated by the cooperative research team consist of the Chang Gung University, Chang Gung hospital, Academia Sinica, the Institute of Preventive Medicine, Ministry of National Defense and University of Oxford, and the complete genome sequence of the virus was obtained. Covid-19 strains from different countries around the world could be used as a test reagent or antiviral treatment material, bringing new opportunities in the future. At present, the research team has established a method to accurately detect the titer of the virus to evaluate the test and treatment effect. [https://tinyurl.com/y3etxff8]

長庚團隊 突破性COVID-19快篩試劑判讀結果





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Education for SDGs

Meaningful education

Chang Gung University promotes the student volunteer service program, provides volunteer education and training and related subsidies, and regularly handles student group volunteer service activities with off-campus social service, education, counseling, culture and other units working in the public interest. It also has set up "key points for the implementation of volunteer service in Chang Gung University", which encourages students to be committed to and carry forward the virtues of volunteer service, thus promoting the humanistic care.

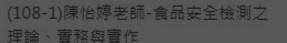
https://studentaffairs.cgu.edu.tw/p/412-1012-438.php?Lang=zh-tw

USR認證課程成果

Chang Gung University has a university social responsibility office to implement the guide plan of SDGs, provides services for remote rural places and aboriginal tribes, and develop educational resources related to university social responsibility

https://usr.cgu.edu.tw/p/412-1019-9640.php?Lang=zh-tw





(109-1)蔡佳玲老師-兒少生命教育輔

治療學



Meaningful education

The USR health promotion intervention team of the university teaches and trains the service personnel of local cultural and health stations and clinics to learn gait balance assessment and action health education, and tutors and establishes relevant education and training mechanisms to assist the residents to develop independent and continuous health promotion programs, implement health classification management and increase the motivation for sustainable management. https://usr.cgu.edu.tw/p/406-1019-

82050,r2177.php?Lang=zh-tw

The USR early-treatment childhood care team of our university trained primary and secondary school teachers in Fuxing district on the understanding of students with dyslexia, enhanced the relevant special education knowledge and ability of parents on dyslexia, and assisted the school in applying for the "Taoyuan 2020 Implementation Plan to Strengthen the Special Education Knowledge and Ability of School Staff and Parents" to deal with the problem of about 65% of students having dyslexia in this area. https://usr.cgu.edu.tw/var/file/19/1019/img/2622/5530 54381.pdf





Meaningful education

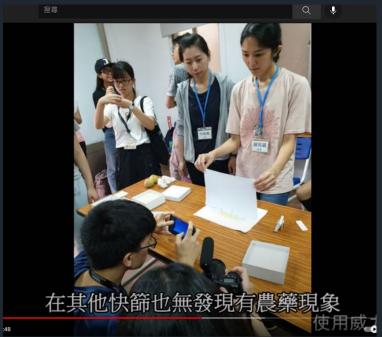
CGU/ CGMH, together with a number of simulation instrument manufacturers and specialists, selected the best simulation teaching aids, constructed diversified training courses, and established an "i-simulation center". Through various curriculum designs, combined with various scientific and technological simulations, teachers' guidance, students' specific learning experience, teamwork, mutual observation and self-reflection, the concept will be formed and finally applied to the real clinical situation to improve patient safety and treatment effectiveness. https://www.chinatimes.com/realtimenews/20200814000859-260405?chdtv

CGU/CGMH launched the "Comprehensive Sports Medicine Care Services of Chang Gung Memorial Hospital", which takes sports players as the center to structure the care mode of the medical team, and provides integrated care and medical services such as sponsoring players to apply for protectors, customized physical examination, medical subsidies and overseas competition bonuses in combination with professional doctors, sports protectors, nutritionists, physiotherapists and psychologists.

https://health.ltn.com.tw/article/breakingnews/32









Specific courses

In order to promote the University's practice of university social responsibility and promote the field teaching experience of teachers in the University, the academic affairs meeting adopted the "certification measures for social responsibility practice courses of Chang Gung University" in February 2019 to develop special courses related to social responsibility. In the 2019 academic year, a total of 7 courses were approved (The theory and practice of food-safety detection; Health issues on aboriginal children's health in Taiwan; Product Design Analysis; Scientific Assessment of Rehabilitation; Health Services Financial Management; Interaction Between University and Community—Investigation and Practice of Zhentian Temple in Jiu Lu Vil., Guishan Dist., Taoyuan City; Aboriginal area practice course of children's physical therapy evaluation tools), encouraging teachers and students to go out of classroom for learning and participate in social responsibility practice.

https://usr.cgu.edu.tw/p/405-1019-63658,c9429.php?Lang=zh-tw



Chang Gung University provides special promotion and education activities for local residents, alumni and unemployed workers. On the other hand, the university's social responsibility promotion office not only assists teachers in setting up special courses on social responsibility, but also encourages them to integrate field teaching into the existing courses of the Department (Strategies to disability and dementia prevention in community, The Physical-Cognitive Dual Task, Physical Therapy in Elderly and Long-term Care, Assistive technology (AT), etc.), changing the teaching mode that used to focus on classroom teaching into actual community field practice, allowing students to participate in local community construction activities and cultivating the ability and creativity of innovative thinking, so that they can also explore local problems and assist in developing solutions. In the future, it is planned to continue to promote and open innovative courses and field teaching, transform field experience into the connotation of teaching and technological innovation, and recruit students with professional backgrounds from different colleges, so that learners can learn professional courses in different fields.

- Promote education https://academic.cgu.edu.tw/p/412-1009-4350.php?Lang=zh-tw
- Alumni Service Network https://cguas.cgu.edu.tw/p/403-1050
 18.php?Lang=zh-tw
- USR Office https://usr.cgu.edu.tw/p/412-1019-9640.php?Lang=zh-tw







We educate, research, and innovate for global and social impacts



